

26.

1 Claims :

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3 1. A method of dyeing a fabric material, said
4 material being a woven felt which comprises
5 warp and weft yarns, said method comprising the
6 step of contacting said woven felt with a
7 ^{reducing} bleaching agent prior to or simultaneously with
8 a fluorescent dye providing said colour.

9

10 2. The method as claimed in Claim 1, wherein the
11 dyestuff is a yellow dye.

12

13 3. The method as claimed in either Claim 1 or 2,
14 wherein said yellow dye has a colour index
15 number acid yellow 250.

16

17 4. The method as claimed in any one of Claims 1 to
18 3, wherein said material is made from a mixture
19 of fibres of different types.

20

21 5. The method as claimed in any one of Claims 1 to
22 4, wherein said material comprises a mixture of
23 wool and synthetic fibres.

24

25 ^{Sus} 6. The method as claimed in Claim 5, wherein said
26 ⁶² synthetic fibres are polyamide fibres.

27

28 7. The method as claimed in Claim 6, wherein said
29 polyamide fibres are Nylon 6,6 fibres.

30

- 1 8. The method as claimed in any one of Claims 1 to
2 7, wherein the content of wool fibres in said
3 material is at least 20% by weight,
4
5 9. The method as claimed in any one of Claims 1 to
6 8, wherein the content of wool fibres in said
7 material is at least 25% by weight.
8
9 10. The method as claimed in any one of Claims 1 to
10 9, wherein the content of wool fibres in said
11 material is at least 40% by weight.
12
13 11. The method as claimed in any one of Claims 1 to
14 10, wherein said weft yarns comprise at least
15 20% by weight of wool.
16
17 12. The method as claimed in any one of Claims 1 to
18 10, wherein said weft yarns comprise at least
19 30% by weight of wool.
20
21 13. The method as claimed in any one of Claims 1 to
22 10, wherein said weft yarns comprise at least
23 40% by weight of wool.
24
25 14. The method as claimed in any one of Claims 1 to
26 13, wherein said material is processed in piece
27 form.
28
29 15. The method as claimed in any one of Claims 1 to
30 14, wherein said material is contacted with a
31 partitioning agent.

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1 16. The method as claimed in Claim 15, wherein said
2 partitioning agent is an alkylarylsulphonate in
3 water and comprises 50-60% by weight of the
4 salt of dodecylbenzenesulphonic and
5 triethanolamine.

6
7 17. The method as claimed in any one of Claims 1 to
8 16, wherein said material is treated using a
9 jet-dyeing apparatus.

10 *Sub 4*
11 18. The method as claimed in Claim 17, wherein a
12 liquor ratio of from 6:1 to 8:1 is used to run
13 said jet-dyeing apparatus.

14
15 19. The method as claimed in Claim 15, wherein the
16 pH of the liquor is of from 4.2 to 4.5.

17
18 20. The method as claimed in any one of Claims 1 to
19 19, wherein said material is contacted with the
20 bleaching agent prior to said material being
21 contacted with said fluorescent dye.

22
23 21. The method as claimed in any one of Claims 15
24 to 16, wherein said material is contacted with
25 the partitioning agent prior to said material
26 being contacted with said fluorescent dye.

27
28 22. The method as claimed in any one of Claims 15,
29 16 and 18, wherein said bleaching agent is
30 added simultaneously or quasi-simultaneously
31 with the partitioning agent.

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1 23. The method as claimed in any one of Claims 1 to
2 22, wherein said bleaching agent is an
3 inorganic reducing agent with chelating agents
4 and comprises 30-40% by weight tetrasodium
5 ethylene-diaminetetraacetate and 30-40% by
6 weight disodium disulphite.

7
8 24. A coloured fabric material obtainable according
9 to the method described in any one of Claims 1
10 to 23.

11 *Subs*
12 25. The use of a dyed fabric material as claimed in
13 Claim 24 for the manufacture of a sports ball.

14
15 26. The use claimed in Claim 25, wherein said
16 sports ball is a tennis ball.

17
18 27. A coloured (non-white) fabric material suitable
19 for use in sports ball manufacture, said
20 material being a woven felt which comprises
21 warp and weft yarns, wherein said material
22 includes wool fibres and exhibits the following
23 characteristics:

- 24 i) a chroma value of 100 or more;
- 25 ii) a lightness value of 95 or more; and
- 26 iii) a reflectance value of 120 or more.

27
28 28. The fabric material of Claim 27, wherein said
29 chroma value is 105 or more.

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1 29. The fabric material as claimed in either one of
2 Claims 27 and 28, wherein said lightness value
3 is 96 or more.

4
5 30. The fabric material as claimed in any one of
6 Claims 27 to 29, wherein said reflectance value
7 is 125 or more.

8
9 31. The fabric material as claimed in any one of
10 Claims 27 to 29, which exhibits the following
11 characteristics:

- 12 i) a chroma value of 110 or more;
13 ii) a lightness value of 97 or more; and
14 iii) a reflectance value of 128 or more.

15 *35*
16 *26* 32. A white fabric material suitable for use in
17 sports ball manufacture, said material being a
18 woven felt which comprises warp and weft yarns,
19 wherein said material includes wool fibres and
20 exhibits the following characteristics:

- 21 i) a chroma value of 14 or less;
22 ii) a lightness value of 85 or more;
23 and
24 iii) a reflectance value of 100 or
25 more.

26
27 33. A white fabric material as claimed in Claim 32,
28 wherein said chroma value is 8 or lower.

29
30 34. A white fabric material as claimed in either
31 one of Claims 32 and 33, having a lightness
32 value of 92 or greater.

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2 35. A white fabric material as claimed in any one
3 of Claims 32 to 34, having a reflectance value
4 of 85 or more.
5
6 36. A white fabric material as claimed in any one
7 of Claims 32 to 35, which exhibits the
8 following characteristics:
9 i) a chroma value of 5 or less;
10 ii) a lightness value of 93 or more; and
11 iii) a reflectance value of 90 or more.
12
13 37. A fabric material as claimed in any one of
14 Claims 27 to 36, wherein said material is made
15 of a mixture of fibres of different types.
16
17 38. A fabric material as claimed in any one of
18 Claims 27 to 37, wherein said material
19 comprises a mixture of wool and synthetic
20 fibres.
21 *gibber*
22 39. A fabric material as claimed in Claim 38,
23 wherein said synthetic fibres are polyamide
24 fibres.
25
26 40. A fabric material as claimed in Claim 39,
27 wherein said polyamide fibres are Nylon 6,6
28 fibres.
29
30 41. A fabric material as claimed in any one of
31 Claims 27 to 44, wherein the content of wool

- 1 fibres in said material is at least 20% by
2 weight.
3
- 4 42. A fabric material as claimed in any one of
5 Claims 27 to 41, wherein the content of wool
6 fibres in said material is at least 40% by
7 weight.
8
- 9 43. A fabric material as claimed in any one of
10 Claims 27 to 42, wherein said weft yarns
11 comprise at least 20% by weight of wool.
12
- 13 44. A fabric material as claimed in any one of
14 Claims 27 to 43, wherein said weft yarns
15 comprise at least 30% by weight of wool.
16
- 17 45. A fabric material as claimed in any one of
18 Claims 27 to 44, wherein said weft yarns
19 comprise at least 40% by weight of wool.
20
- 21 46. A sports ball having a fabric material outer
22 surface, said fabric material being a fabric
23 material as defined in any one of Claims 27 to
24 45.
25 47. A sports ball as claimed in Claim 46 which is a
26 tennis ball.
27
- 28
- 29 48. A sports ball having a fabric material outer
30 surface, said fabric material being a fabric
31 material as obtained by the method of any one
32 of Claims 1 to 24.

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49. A sports ball as claimed in Claim 48 which is a
tennis ball.

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